



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

May 21st.

Vice President BRIDGES, in the Chair.

Thirty-four members present.

Papers were presented for publication, entitled :

"Descriptions of Forty-nine New Species of the Genus *Malania*," by Isaac Lea.

"Synopsis of the *Uranoscopoids*," by Theo. Gill.

May 28th.

Mr. LEA, President, in the Chair.

Twenty-eight members present.

On report of the respective committees, the following papers were ordered to be published in the Proceedings :

On the HAPLOIDONOTINÆ.

BY THEODORE GILL.

There are found in the larger fresh water rivers and lakes of North America, west of the Rocky Mountains, and in the sea and inlets along its eastern and gulf coast, fishes which have the closest external resemblance to the typical *Sciænoids*, and especially to the *Corvinæ*. Yet those fishes whose external characters are scarcely sufficient to even justify generic separation from the *Corvinæ* are distinguished by a structure of the lower pharyngeal bones, which is entirely different from that exhibited by the corresponding bones of the *Sciæninæ*. The difference existing between them is of such character that the learned Johannes Müller considered himself justified in assigning to them an ordinal value, and his views have been since adopted by almost all of the most learned ichthyologists. In the *Sciæninæ*, the lower pharyngeal bones are always and as decidedly distinct from each other as in any of the *Acanthopteri* of Müller. In the fishes now under discussion, the corresponding bones of the adult are firmly and immovably united in the same manner as those of the *Pharyngognathi*. The study of them is therefore of the greatest interest and importance, for we have thus the simple question of the value of the comparative characters of one part of the organization, relieved of all secondary considerations, to decide upon. There are no other differences of structure to accompany this one supposed fundamental character.

There had been previously known many forms, which had respectively the acanthopteran and pharyngognathan pharyngeal bones, which mutually resemble each other. Such are the *Centrarchinæ* and the *Chromoids*. The members of these two groups have a very strong resemblance to each other. This is equally exhibited in form, in the armature of the fins, in color and in habits. But it is found that while the first fishes have always teeth, at least on the vomer, six branchiostegal rays and an entire lateral line, the *Chromoids* have the palatine arch entirely edentulous, only five branchiostegal rays, and the lateral line always interrupted; it may perhaps be also added that the fishes of the last family have the intermaxillary bones with longer ascending processes, and consequently capable of greater protrusion than those of the

[May.